



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |
|-----------------|-------------|----------------------|------------------------------|------------------|
| 10/748,572      | 12/30/2003  | Richard B. Borgens   | P01254-US-01<br>(19232.0011) | 8077             |

7590 10/05/2005

Jill T. Powlick of Ice Miller  
One American Square  
Box 82001  
Indianapolis, IN 46282-0200

EXAMINER

OWENS JR, HOWARD V

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1623     |              |

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/748,572 | <b>Applicant(s)</b><br>BORGENS, RICHARD B. |  |
|                              | <b>Examiner</b><br>Howard V. Owens   | <b>Art Unit</b><br>1623                    |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year

Claims 1-3, 5-8, 10, 12, 13, 14 - 19 are rejected under 35 U.S.C. § 102(b) as being anticipated by Hill et al., U.S. 6,487,446 (Hill).

Claims 1-3, 5-8, 10, 12, 13, 14 - 19 are drawn to electrically stimulating the site of the spinal cord injury and administering a purine nucleoside or analog thereof to the patient.

Hill et al. anticipates the claims as it teaches the administration of a purine (adenosine) in conjunction with electrical stimulation of the spinal cord to treat the spinal cord (col.1-2), wherein the adenosine may be administered systemically, orally or subcutaneously (col. 11-14).

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-19 are rejected under 35 U.S.C. § 103 as being unpatentable over Hill et al., U.S. 6,487,446.

Claims 1-3, 5-8, 10, 12, 13, 14 - 19 are drawn to electrically stimulating the site of the spinal cord injury and administering a purine nucleoside or analog thereof to the patient.

Claim 9 is drawn to treatment of a spinal cord injury that occurred 3 months prior to treatment. Claim 11 is drawn to a domestic pet.

Hill et al. teaches the administration of a purine (adenosine) in conjunction with electrical stimulation of the spinal cord via implanted device to treat the spinal cord (col.1-2), wherein the adenosine may be administered systemically, orally or subcutaneously (col. 2, lines 25-65).

Hill does not specifically teach a domestic pet, nor the time that the injury occurred; however, the use of the purine and spinal cord stimulation in the prior art occur after one of skill in the art recognizes that there is damage or that stimulation is required. The fact that the spinal cord injury occurred months earlier does not remove the use of the


Art Unit: 1623

treatment from the purview of one of skill in the art; moreover, Hill teaches the use with patients, which is not restricted to humans, but may also include veterinary treatment.

It would have been prima facie obvious to a person of ordinary skill in the art at the time the invention was made to use a purine and a device to stimulate the spinal cord for the treatment of spinal cord injury in a domestic pet or for an injury 3 months old.

A person of ordinary skill in the art would have been motivated to use a purine and a device to stimulate the spinal cord for the treatment of spinal cord injury in a domestic pet or for an injury 3 months old because the prior art has taught that the combination neuroactive compounds such as adenosine and implanted electrically stimulating devices are beneficial in the treatment of spinal cord injuries.

Howard V. Owens  
Patent Examiner  
Art Unit 1623



James O. Wilson  
Supervisory Patent Examiner  
Technology Center 1600

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Howard Owens whose telephone number is (571) 272-0658 . The examiner can normally be reached on Mon.-Fri. from 8:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the Supervisory Patent Examiner signing this action, James O. Wilson can be reached on (571) 272 - 0661.